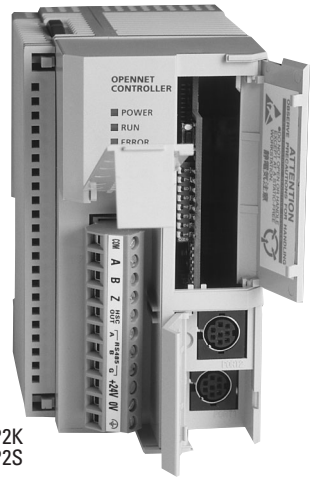
OpenNet Controller



FC3A-CP2K
FC3A-CP2S

OpenNet Controller
(with memory card connector)

Flash memory card ready

- Digital I/O
  - 8, 16, and 32 point cards
  - 224 inputs and outputs, 480 with expansion power supply
- Analog I/O
  - up to 42 analog inputs or 14 analog outputs
  - 0-5V, 0-10V, ±5V, ±10V, 4-20mA
- Built-In Communications Ports
  - 2 RS232 (programming port, ASCII, printer and modem ready)
  - 1 RS485 (programming port and data link)
- Built-in High-Speed Counter
  - 1 channel, 10kHz, 16-bit resolution
- Memory
  - 16K words (8K steps) user program capacity
  - Flash miniature memory card slot (FC3A-CP2KM/SM only)
- Realtime Calendar/Clock
- Password Protection
- PID Algorithm

•Networking

ONC capable of communicating with INTERBUS networks

•Programming Software; WindLDR®

- Programs all IDEC PLCs
- Windows-based (compatible with Windows 95, 98, 2000, NT 4.0, ME or XP)

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•Programming Instructions

- Transmit/Receive
- Built-in X/Y Conversion
- Sub-Routine Call/Return for Modular Programming
- Square Root
- 16- and 32-bit Math, Add, Sub, Mult, Div
- Data Conversion to/from Dec, Hex, BCD, ASCII
- Block Move
- Summation
- Averaging
- Day of Week Program Scheduling

•Built-in Hayes "AT" command set for modem dialup/ pager applications

Hardware Features

CPUs	**FC3A-CP2K**	High-speed counter sink output, no memory card connector
	FC3A-CP2KM	High-speed counter sink output with memory card connector
	FC3A-CP2S	High-speed counter source output, no memory card connector
	FC3A-CP2SM	High-speed counter source output with memory card connector
Electrical Specifications	**Rated Voltage**	24V DC (19-30V DC, including ripple)
	Maximum Input Current	1.5A at 24V DC
	Reverse Polarity Protection	Prevents damage if incorrectly wired.
	Operating Temperature	0 to +55°C
	Storage Temperature	-25 to +70°C
	Relative Humidity	30 to 95% (non-condensing)
	Vibration Resistance	10 to 57 Hz, amplitude 0.075mm 57 to 150 Hz 9.8 m/sec^2 10 sweep cycles/axis (IEC 1131)
	Shock Resistance	147 m/sec^2, 11 ms 3 shocks each in 3 axes (IEC 1131)
	Dielectric Strength	Between power terminal and FG: 500V AC, 1 min Between I/O terminal and FG: 1500V AC, 1 min
	Ground	Grounding resistance 100Ω (maximum)
	Mounting Style	35mm DIN rail

The eighth slot must be expansion power supply module. (Above photo is only an example of the range of available modules.)

		Standard ONC CPU
General ONC Specifications	**Available Instructions**	37 basic, 65 advanced (PID, square root, subroutine calls, etc.)
	User Program Capacity	16K words flash memory
	Memory (Miniature Card)	2MB
	Average Scan Time	1 ms or greater
	Input	224 points (I0-I277)
	Output	224 points (Q0-Q277)
	Total I/O Points	Using expansion power supply: 480 I/O points
	Internal Relay	2048 (M0-M2557)
	Special Internal Relay	192 (M8000-M8237)
	Shift Register	256 (R0-R255)
	Timer	256 (T0-T255; 1-sec, 100-msec, 10-msec, 1-msec)
	Counter	256 (C0-C255; adding, dual pulse reversible, up/down selection reversible)
	Data Register	8000 (D0-D7999)
	Link Register	256 master (L1000 - L1317), 168 slave (L100 - L127, L200 - L227, ..., L700 - L727)
	Remote I/O	512 points
	Real-Time Calendar/Clock Runtime	Yes
	Program Protection	Yes (password protected)
	External Run/Stop Control	Yes
	Power Failure Protection	Yes
	Self-Diagnostics	Yes
	Auto Start Function	Yes

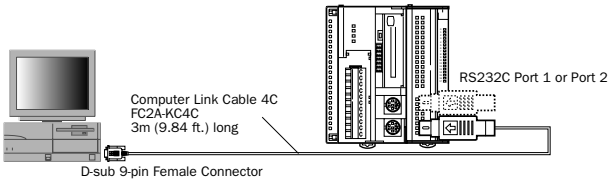
Part Numbers: OpenNet Controller

Item		Description	Part Number
CPU Modules		High-speed counter, sink output type, No memory card available	FC3A-CP2K
		High-speed counter, sink output type, With memory card connector	FC3A-CP2KM
		High-speed counter, source output type, No memory card available	FC3A-CP2S
		High-speed counter, source output type, With memory card connector	FC3A-CP2SM
Input Modules	**DC Input**	16 points 24V DC input, sink/source compatible, terminal block	FC3A-N16B1
		16 points 24V DC input, sink/source compatible, nylon connector (10P*2)	FC3A-N16B3
		32 points 24V DC input, sink/source compatible, nylon connector (10P*2)	FC3A-N32B4
		32 points 24V DC input, sink/source compatible, FUJITSU connector	FC3A-N32B5
	AC Input	8 points 100V AC input, terminal block	FC3A-N08A11
	Analog Input	6 channels, 4-20mA,selectable by DIP sw, terminal block	FC3A-AD1261
Output Modules	**Analog Output**	2 channels, 4-20mA, selectable by DIP sw, terminal block	FC3A-DA1221
	Relay Output	16 points relay output, terminal block	FC3A-R161
		16 points relay output, nylon connector (5P*4)	FC3A-R162
	Transistor Output	16 points transistor output sink, terminal block	FC3A-T16K1
		16 points transistor output sink, nylon connector	FC3A-T16K3
		16 points transistor output protect source, terminal block	FC3A-T16P1
		32 points transistor output sink, nylon connector	FC3A-T32K4
		32 points transistor output sink, FUJITSU connector	FC3A-T32K5
Expansion Module		Expansion power supply	FC3A-EA1
Network Interface Modules		Remote I/O Master Module	FC3A-SX5SMI
		IDEC-Modbus Converter Package (see Communication & Networking section page M-13 for details)	IDEC-MBUS-CONVPCK
Accessories		Memory Card (2MB)	FC9Z-MC02
		Housing (4 pcs/bag) for FC3A-R162	VHR-5N
		Housing (2 pcs/bag) for FC3A-T16K3, -N16B3	VHR-10N
		Housing (2 pcs/bag) for FC3A-T32K4, -N32B4	H18-SHF-AA
		Pins (40 pcs/bag) for FC3A-T32K4, -N32B4	SHF-001T-0.8BS
		Pins (20 pcs/bag) for FC3A-R162/T16K3, -N16B3	SVH-21T-P1.1
		Cable with Fujitsu connector (for FC3A-T32K5/N32B5)	FC3A-KUSA1
		Breakout Module (for FC3A-T32K5, -N32B5)	BX1D-T40A or BX1D-S40A
Software		Windows-based programming software for IDEC PLCs (for more information, see page J-44)	WINDLDR
		Software application to link OPC/DDE compliant windows applications to IDEC PLCs (for more information see Communication Section page M-3)	WINDSRV
Programming Cable		Cable to connect ONC to PC	FC2A-KC4C
Manuals		ONC User Manual	EM345-0
		ONC DeviceNet Manual	EM335-0
		ONC LONWORKS Manual	EM336-0

OpenNet Controller, Networking & Applications

PC Communication

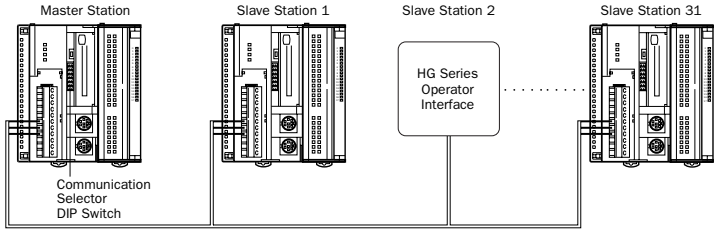
The ONC is programmed by our intuitive WindLDR™ software
-use RS232 or RS485 ports
-upload, download and monitor programs



For RS485 programming, use FC2A-KC6C cable.

Data Link - Superiority in Networking

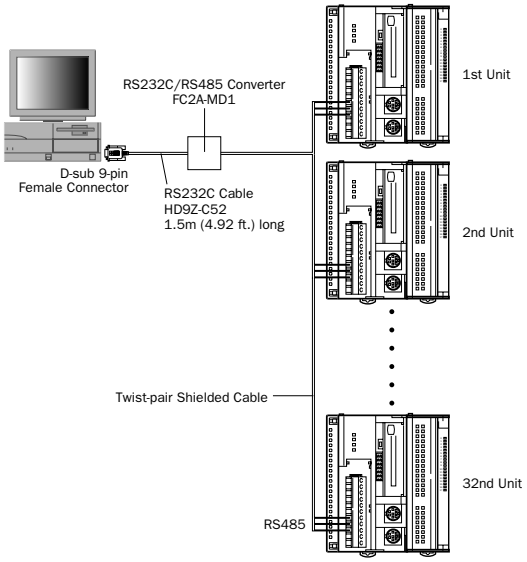
Connect up to 32 ONC, Micro3, FA Series PLCs or the HG Series operator interface on the data link network.



Computer Link - Power & Versatility

Connect 32 ONCs on a 1:N computer link system.

Upload, download, monitor, and update data.



Communication Flexibility

Easy connections to any R232C equipment through the user defined RS232C port 1 or 2.

Built-in Hayes "AT" command set for direct modem dialup and pager applications.